

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-2 (Canceled).

Claim 3 (Currently Amended): The RAM A random access memory (RAM) incorporated display driver according to claim 1, further comprising: for displaying display data stored in the incorporated RAM on a display screen, comprising:

a RAM configured to store the display data to be displayed on the display screen;
a latch shift register configured to receive the display data read out from said RAM and if said display screen is intended to be scrolled in a horizontal direction, shift said read out display data depending on the scrolling direction and if said display screen is intended to be scrolled in a vertical direction, hold said read out display data;
an access control circuit configured to read out the display data from said RAM, send the read out display data to said latch shift register, and if said display screen is intended to be scrolled in a horizontal direction, write back the display data shifted by said latch shift register into an original region in said RAM and if said display screen is intended to be scrolled in a vertical direction, write back the display data held by said latch shift register into a region in said RAM moved by the amount of the scroll from the original region of said RAM, and supply the written back display data in said RAM to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and
a first selecting circuit configured to select a region in a horizontal direction capable of being scrolled in the display screen, wherein said access control circuit supplies display data in a region selected by said first selecting circuit to said latch shift register.

Claim 4 (Currently Amended): The RAM A random access memory (RAM) incorporated display driver according to claim 1, further comprising: for displaying display data stored in the incorporated RAM on a display screen, comprising:

a RAM configured to store the display data to be displayed on the display screen;

a latch shift register configured to receive the display data read out from said RAM and if said display screen is intended to be scrolled in a horizontal direction, shift said read out display data depending on the scrolling direction and if said display screen is intended to be scrolled in a vertical direction, hold said read out display data;

an access control circuit configured to read out the display data from said RAM, send the read out display data to said latch shift register, and if said display screen is intended to be scrolled in a horizontal direction, write back the display data shifted by said latch shift register into an original region in said RAM and if said display screen is intended to be scrolled in a vertical direction, write back the display data held by said latch shift register into a region in said RAM moved by the amount of the scroll from the original region of said RAM, and supply the written back display data in said RAM to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and

a second selecting circuit configured to select a region in a vertical direction capable of being scrolled in the display screen, wherein said access control circuit supplies display data in a region selected by said second selecting circuit to said latch shift register.

Claim 5 (Currently Amended): The RAM incorporated display driver according to claim 3, wherein said first selecting circuit includes a shift register of the same bit number as that of one dot line of said RAM.

Claim 6 (Currently Amended): The RAM incorporated display driver according to claim 4, wherein said ~~second~~ selecting circuit includes a comparing circuit configured to compare a value of an address in a vertical direction to be scrolled with a content of an address counter indicating a selected address in the vertical direction in said RAM.

Claims 7-9 (Canceled).

Claim 10 (Currently Amended): ~~The An image display apparatus according to claim 8, wherein said system driver further comprises: for display data stored in an incorporated RAM, comprising:~~

a display;

a system driver for driving said display; and

a CPU for supplying a signal for controlling the display screen to said system driver,
wherein said system driver includes:

a RAM configured to store the display data to be displayed on the display screen;

a latch shift register configured to receive the display data read out from said RAM
and if said display screen is intended to be scrolled in a horizontal direction, shift said read
out display data depending on the scrolling direction and if said display screen is intended to
be scrolled in a vertical direction, hold said read out display data; and

an access control circuit configured to read out the display data from said RAM, send
the read out display data to said latch shift register, and if said display screen is intended to be
scrolled in a horizontal direction, write back the display data shifted by said latch shift
register into an original region in said RAM and if said display screen is intended to be
scrolled in a vertical direction, write back the display data held by said latch shift register into
a region in said RAM moved by the amount of the scroll from the original region of said

RAM, and supply the written back display data in said RAM to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and

a first selecting circuit configured to select a region in a horizontal direction capable of being scrolled in the display screen, wherein said access control circuit supplies display data in a region selected by said first selecting circuit to said latch shift register.

Claim 11 (Currently Amended): The An image display apparatus according to claim 8, wherein said system driver further comprises: for display data stored in an incorporated RAM, comprising:

a display;

a system driver for driving said display; and

a CPU for supplying a signal for controlling the display screen to said system driver, wherein said system driver includes:

a RAM configured to store the display data to be displayed on the display screen;

a latch shift register configured to receive the display data read out from said RAM and if said display screen is intended to be scrolled in a horizontal direction, shift said read out display data depending on the scrolling direction and if said display screen is intended to be scrolled in a vertical direction, hold said read out display data; and

an access control circuit configured to read out the display data from said RAM, send the read out display data to said latch shift register, and if said display screen is intended to be scrolled in a horizontal direction, write back the display data shifted by said latch shift register into an original region in said RAM and if said display screen is intended to be scrolled in a vertical direction, write back the display data held by said latch shift register into a region in said RAM moved by the amount of the scroll from the original region of said

RAM, and supply the written back display data in said RAM to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and
a second selecting circuit configured to select a region in a vertical direction capable of being scrolled in the display screen, wherein said access control circuit supplies display data in a region selected by said second selecting circuit to said latch shift register.

Claim 12 (Currently Amended): The image display apparatus according to claim 10, wherein said ~~first~~ selecting circuit includes a shift register of the same bit number as that of one dot line of said RAM.

Claim 13 (Currently Amended): The image display apparatus according to claim 11, wherein said ~~second~~ selecting circuit includes a comparing circuit configured to compare a value of an address in a vertical direction to be scrolled with a content of an address counter indicating a selected address in the vertical direction in said RAM[[>]].

Claims 14-16 (Canceled).

Claim 17 (Currently Amended): ~~The A memory incorporated display driver according to claim 15, further comprising: for displaying display data stored in the incorporated memory on a display screen, comprising:~~
a memory configured to store the display data to be displayed on the display screen;
a latch shift register configured to receive the display data read out from said memory
and if said display screen is intended to be scrolled in a horizontal direction, shift said read
out display data depending on the scrolling direction and if said display screen is intended to
be scrolled in a vertical direction, hold said read out display data; and

an access control circuit configured to read out the display data from said memory, send the read out display data to said latch shift register, and if said display screen is intended to be scrolled in a horizontal direction, write back the display data shifted by said latch shift register into an original region in said memory and if said display screen is intended to be scrolled in a vertical direction, write back the display data held by said latch shift register into a region in said memory moved by the amount of the scroll from the original region of said memory, and supply the written back display data in said memory to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and

a ~~first~~ selecting unit configured to select a region in a lateral direction capable of being scrolled in the display screen, wherein said access control unit supplies display data in a region selected by said ~~first~~ selecting unit to said latch shift unit.

Claim 18 (Currently Amended): ~~The A~~ memory incorporated display driver according to claim 15, ~~further comprising:~~ for displaying display data stored in the incorporated memory on a display screen, comprising:

a memory configured to store the display data to be displayed on the display screen; a latch shift register configured to receive the display data read out from said memory and if said display screen is intended to be scrolled in a horizontal direction, shift said read out display data depending on the scrolling direction and if said display screen is intended to be scrolled in a vertical direction, hold said read out display data; and

an access control circuit configured to read out the display data from said memory, send the read out display data to said latch shift register, and if said display screen is intended to be scrolled in a horizontal direction, write back the display data shifted by said latch shift register into an original region in said memory and if said display screen is intended to be

scrolled in a vertical direction, write back the display data held by said latch shift register into a region in said memory moved by the amount of the scroll from the original region of said memory, and supply the written back display data in said memory to said display screen according to a screen control signal supplied by a CPU configured outside of the display driver; and

a ~~second~~ selecting unit configured to select a region in a longitudinally direction capable of being scrolled in the display screen, wherein said access control unit supplies display data in a region selected by said ~~second~~ selecting unit to said latch shift unit.

Claim 19 (Currently Amended): The memory incorporated display driver according to claim 17, wherein said ~~first~~ selecting unit includes a shift register of the same bit number as that of one dot line of said memory.

Claim 20 (Currently Amended): The memory incorporated display driver according to claim 18, wherein said ~~second~~ selecting unit includes a comparator configured to compare a value of an address in a longitudinal direction to be scrolled with a content of an address counter indicating a selected address in the longitudinal direction in said memory.

Claims 21-24 (Canceled).